

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-10 (Canceled).

Claim 11 (Currently Amended): An electric propulsion system for a motor vehicle, comprising:

a fuel-cell stack provided with at least one assembly of two electrodes, each electrode having an electrode inlet and outlet, and an electrolytic membrane disposed between the two electrodes,

wherein the electrolytic membrane contains conductive charges of protons distributed in a concentration gradient within a thickness of the membrane, such that water in a liquid state produced by the fuel-cell stack is concentrated at one of the electrodes, and

wherein the concentrated water in the liquid state is evacuated from the fuel-cell stack via a single electrode outlet.

Claim 12 (Previously Presented): A system according to claim 11, wherein the electrolytic membrane is a multi-layer membrane.

Claim 13 (Currently Amended): A system according to claim 11, wherein a maximum concentration of conductive charges of the membrane is situated on a same side as an anode of the two electrodes, such that the water in the liquid state produced by the fuel-cell stack is concentrated at the anode.

Claim 14 (Currently Amended): A system according to claim 11, wherein a maximum concentration of conductive charges of the membrane ~~wherein~~ is situated on a

same side as a cathode of the two electrodes, such that the water in the liquid state produced by the fuel-cell stack is concentrated at the cathode.

Claim 15 (Previously Presented): A system according to claim 11, wherein the single electrode outlet of the fuel-cell stack is connected to a single condenser.

Claim 16 (Currently Amended): A system according to claim 15, wherein [[the]] condensed water discharged from the condenser feeds a reformer configured to supply hydrogen from a fuel to the fuel-cell stack.

Claim 17 (Previously Presented): A system according to claim 15, further comprising a burner connected to an anode of the two electrodes to recover energy of gases discharged from the anode.

Claim 18 (Previously Presented): A system according to claim 13, wherein the single electrode outlet of the fuel-cell stack is connected to a single condenser.

Claim 19 (Previously Presented): A system according to claim 18, further comprising a burner connected to an anode of the two electrodes to recover energy of gases discharged from the anode.

Claim 20 (Previously Presented): A system according to claim 17, wherein the burner is disposed downstream from the condenser.

Claim 21 (Previously Presented): A system according to claim 19, wherein the burner is disposed downstream from the condenser.

Claim 22 (Currently Amended): A method for using a fuel-cell stack in an electric propulsion system for a motor vehicle, comprising:

concentrating water in a liquid state produced by the fuel-cell stack at one of two electrodes by an electrolytic membrane containing conductive charges of protons distributed in a concentration gradient within a thickness of the membrane;

vaporizing within the one electrode the concentrated water in the liquid state;

condensing the vaporized water in a condenser connected to an outlet of the one electrode; and

using the condensed water to feed a reformer configured to generate hydrogen to feed the fuel-cell stack.

Claim 23 (Previously Presented): A vehicle provided with a system according to claim 11.

Claim 24 (New): An electric propulsion system for a motor vehicle, comprising:
a fuel-cell stack including a first electrode, a second electrode, and an electrolytic membrane disposed between the first electrode and the second electrode; and

a condenser connected to a first electrode by a single electrode outlet, wherein

the electrolytic membrane contains conductive charges of protons distributed in a concentration gradient such that a maximum concentration of the conductive charges of protons within a thickness of the membrane is located closest to the first electrode to concentrate water in a liquid state produced by the fuel-cell stack at the first electrode, and

the concentrated water in the liquid state is evacuated from the fuel-cell stack via the single electrode outlet.

Claim 25 (New): A system according to claim 24, wherein
the electrolytic membrane is a multi-layer membrane,
each layer of the multi-layer membrane has a different concentration of conductive charges of protons, and
a layer of the multi-layer membrane with a highest concentration of conductive charges of protons is located closest to the first electrode.